

CLAIMS

What is claimed is:

1. A method of packaging a battery, the method comprising the steps of:
sealing a cell within a packaging material to form a substantially flat edge
extending generally from a centerline of the cell; and
folding the edge seal along multiple substantially parallel lines from about the
centerline of the cell.
2. The method according to claim 1 wherein the fold is configured in a J
shape.
3. The method according to claim 1 wherein the fold is configured in a Z
shape.
4. The method according to claim 1 wherein the fold is configured in a G
shape.
5. The method according to claim 1 further comprising folding the packaging
material along each of a side of the cell.
6. The method according to claim 1 wherein the packaging material
comprises a flexible foil.

7. The method according to claim 1 wherein the cell thickness is less than about 6 millimeters.

8. A method of packaging a battery within a casing having a top and bottom surface, the method comprising the steps of:

sealing a cell within the top and bottom surfaces of the casing to form a substantially flat edge; and

compound folding the edge seal at a point intermediate to the top and bottom surfaces.

9. The method according to claim 8 wherein the step of compound folding comprises configuring the fold in a J shape.

10. The method according to claim 8 wherein the step of compound folding comprises configuring the fold in a Z shape.

11. The method according to claim 8 wherein the step of compound folding comprises configuring the fold in a G shape.

12. The method according to claim 8 wherein the top and bottom members each have a peripheral edge and the step of compound folding is performed along the peripheral edge of each side of the battery to seal the battery within the casing.

13. The method according to claim 8 wherein the casing comprises a flexible foil material.

14. The method according to claim 8 wherein the step of compound folding comprises configuring the fold in a coiled shape.

15. The method according to claim 8 wherein the battery is a lithium ion battery.

16. A battery comprising:

a cell having a positive electrode, a negative electrode, and a separator between the positive and negative electrodes;

a positive electrode terminal connected to the positive electrode;

a negative electrode terminal connected to the negative electrode, the terminals together adapted for providing power to an external load; and

a casing having a top and bottom surface for enclosing therein the cell, the top and bottom surfaces compound folded together with the fold extending generally from a point approximately intermediate to the top and bottom surfaces.

17. The battery according to claim 16 wherein the casing comprises a flexible foil material.

18. The battery according to claim 16 wherein the compound fold extends around a length and width of the cell.

19. The battery according to claim 16 wherein the compound fold is configured in a J shape.

20. The battery according to claim 16 wherein the compound fold is configured in a Z shape.

21. The battery according to claim 16 wherein the compound fold is configured in a G shape.

22. The battery according to claim 16 wherein the cell is a lithium ion cell.

23. An improved packaging for a battery having a top surface and a bottom surface sealed together along an edge, the improvement comprising:

 a compound folded portion along the edge seal extending from a point intermediate to the top and bottom surfaces.

24. The improved packaging for a battery according to claim 23 wherein the compound folded portion is configured in a J shape.

25. The improved packaging for a battery according to claim 23 wherein the compound folded portion is configured in a Z shape.
26. The improved packaging for a battery according to claim 23 wherein the compound folded portion is configured in a G shape.
27. A method of packaging a battery, the method comprising the steps of:
 - sealing a cell within a packaging material to form a substantially flat edge extending from a centerline of the cell; and
 - forming a compound fold at the edge seal against the cell.
28. The method according to claim 27 wherein the fold is configured in a J shape.
29. The method according to claim 27 wherein the fold is configured in a Z shape.
30. The method according to claim 27 wherein the fold is configured in a G shape.